

## CHARACTER AUTOMATIC

### PURPOSE

Specifies a variable that is used as the arguments to the CHARACTER command.

### DESCRIPTION

This command allows a variable to be used as the arguments to the CHARACTERS command. It is typically used with the CHARACTER OFFSET or CHARACTER ANGLE command to label plot points. The most common application is labeling bar charts with the data value, but it can be used in other ways.

This command is restricted to numeric values (it does not allow you to specify alphabetic strings). Also, the CHARACTER command is limited to 4 characters, which means that only the first 4 significant digits of the numeric values are printed (it is most typically used with integer values).

### SYNTAX

CHARACTER AUTOMATIC <variable>

where the first element of <variable> specifies the character for trace 1, the second element specifies the character for trace 2, and so on for up to 100 traces.

### EXAMPLES

```
CHARACTER AUTOMATIC Y
CHARACTER AUTOMATIC PRESSURE.
```

### NOTE 1

Although the CHARACTER command can be used to label plot points, be aware that it has some serious limitations in this regard. The most important limitation is that character labels are limited to 4 characters. If you need more than 4 characters, you have to use the TEXT or LEGEND commands to specify the labels. However, this is more difficult since the coordinates for the TEXT and LEGEND coordinates are given in DATAPLOT 0 to 100 screen units rather than the data units. The MOVEDATA command can be used with the TEXT command (MOVEDATA is an alternate version of MOVE that uses the coordinates of the most recent plot).

### NOTE 2

The CHARACTER AUTOMATIC command with no arguments sets all characters to X.

### DEFAULT

No automatic plot characters are used.

### SYNONYMS

None

### RELATED COMMANDS

PLOT	=	Generates a data or function plot.
CHARACTER	=	Sets the types for plot characters.
CHARACTER ANGLE	=	Sets the angles for plot characters.
CHARACTER CASE	=	Sets the cases for plot characters.
CHARACTER COLOR	=	Sets the colors for plot characters.
CHARACTER FILL	=	Sets the fill switches for plot characters.
CHARACTER FONT	=	Sets the fonts for plot characters.
CHARACTER HW	=	Sets the heights and widths for plot characters.
CHARACTER JUSTIFICATION	=	Sets the justifications for plot characters.
CHARACTER OFFSET	=	Sets the offsets for plot characters.
CHARACTER SIZES	=	Sets the sizes for plot characters.
CHARACTER THICKNESS	=	Sets the thicknesses for plot characters.
CHARACTER WIDTH	=	Sets the widths for plot characters.
LINES	=	Sets the types for plot lines.
SPIKES	=	Sets the on/off switches for plot spikes.
BARS	=	Sets the on/off switches for plot bars.

### APPLICATIONS

Presentation Graphics

## IMPLEMENTATION DATE

89/7

## PROGRAM

```
LEGEND 1 PRESENTATION GRAPHICS
LEGEND 2 3-D BAR HISTOGRAM
.
LET Y = DATA 392 341 307 203 115 59 38 32 29 28
LET N = NUMBER Y
LET X = SEQUENCE 1 1 N
.
LINES BLANK ALL
BAR ON ALL
BAR WIDTH .5 ALL
BAR DIMENSION 3 ALL
BAR FILL ONTS ALL
CHARACTER OFFSET 0 4 ALL
CHARACTER AUTOMATIC Y
YMAX 600
XMAX 12
TITLE DEMONSTRATE CHARACTER AUTOMATIC
TITLE SIZE 5
PLOT Y X X
```

